

Attitudes of Clinical Faculty About Career Progress, Career Success and Recognition, and Commitment to Academic Medicine

Results of a Survey

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Objective: To assess attitudes about career progress, resources for career development, and commitment to academic medicine in physician faculty at an academic medical center who spend more than 50% of their time in clinical care.

Design: Faculty survey.

Setting: Academic medical center and associated Veterans Affairs medical center.

Results: A total of 310 physician faculty responded to the survey. Half of the faculty reported spending 50% or less of their time in clinical care (mean, 31% of time) (group 1) and half reported spending more than 50% of their time in clinical care (mean, 72% of time) (group 2). Group 2 faculty had one third of the time for scholarly activities, reported slower career progress, and were less likely to be at the rank of professor (40% and 16% for groups 1 and 2, respectively; $P < .001$) or to be tenured (52% and 26%, respectively; $P < .001$) despite simi-

lar age and years on faculty. Group 2 faculty were 50% more likely to report that tenure and promotion criteria were not reviewed at their annual progress report ($P = .003$) and that they did not understand the criteria ($P < .001$). Group 2 faculty valued excellence in patient care over scholarship and national visibility. Group 2 faculty reported greater dissatisfaction with academic medicine and less commitment to a career in academic medicine.

Conclusions: Physician faculty who spend more than 50% of their time in clinical care have less time, mentoring, and resources needed for development of an academic career. These obstacles plus differences in their attitudes about career success and recognition contribute to significant differences in promotion. These factors are associated with greater dissatisfaction with academic medicine and lower commitment to academic careers.

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IN THE PAST 2 decades, academic medical centers have hired more faculty whose major role is teaching and clinical care.¹ These faculty, often referred to as clinician-educators, expand the referral base of the academic medical center; provide an important source of teaching for medical students, residents, and fellows; and generate clinical income to support the mission of the academic medical center. However, there is concern that academic medical centers have not adequately invested in the career development of these faculty and that the promotion and tenure criteria at many institutions do not equitably recognize or reward their contributions.²⁻¹⁰ We were interested in understanding the attitudes of these physician faculty about their career development, academic progress, career success, and commitment to a career in academic medicine. We present the results of a survey at 2 affiliated academic medical centers.

RESULTS

Sixty-two percent (567/918) of the faculty responded to the questionnaire, and the respondents were representative of the general faculty by race, sex, academic rank, and part-time status. There were 310 respondents who were physicians and reported time spent in clinical care. Approximately 50% were in group 1 ($\leq 50\%$ of time in clinical care) and 50% were in group 2 ($> 50\%$ of time in clinical care) (**Table**). Faculty in group 1 reported spending an average of 31% of their time in clinical care, whereas faculty in group 2 reported spending 72% of their time in clinical care. The average age and years on the faculty were similar for groups 1 and 2. However, faculty in group 2 were more likely to be women, more likely to be on the collateral (nontenure) track, and less likely to report that they planned to switch to the tenure track. Sixteen percent of the

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MATERIALS AND METHODS

SURVEY

The survey was based on a survey developed at Johns Hopkins Medical School, Baltimore, Md, to assess career development experiences and future expectations of faculty.¹⁰ Survey topics included demographic information, faculty status and track (tenure and nontenure), self-assessment of time for scholarly pursuits and rate of career progress, family responsibilities, availability and quality of mentoring, and questions regarding personal values about career success and recognition. The survey was pre-tested in a discussion group of 8 faculty and revised for clarity. It was mailed to all faculty at the Medical College of Virginia Campus, Virginia Commonwealth University (VCU) School of Medicine, Richmond, and the associated Veterans Affairs Medical Center by the VCU Survey Research Laboratory in the spring of 1997. Reminder cards were mailed to all faculty, and a second questionnaire was sent to nonrespondents 1 month later. The survey was coded to ensure confidentiality, and responses were sent to the VCU Survey Research Laboratory. The results of this survey for women faculty were reported previously.¹¹

STATISTICAL METHODS

The analysis was limited to questionnaires from faculty with an MD degree. Faculty were asked how much of their time they spent providing clinical care and were divided into 2 groups: group 1 included faculty who reported spending 50% or less of their time in clinical care and group 2 included faculty who reported spending greater than 50% of their time in clinical care. Descriptive statistics were used to characterize respondents by demographics. Wilcoxon rank sum and χ^2 tests were used to examine differences between groups. Multiple logistic regression was used to determine which factors were associated with high commitment to academic medicine. Logistic regression was also used to compare commitment to academic medicine adjusting for surgical and nonsurgical departments. Analyses were performed using statistical software (JMP, version 3.1.6, and StatView, version 5.0; SAS Institute Inc, Cary, NC).

faculty in group 2 were full professors compared with 40% in group 1.

Faculty in group 2 reported that they had significantly less time for academic activities, were less likely to have a mentor, and were more likely to report slower career progress (Table). Group 2 faculty with mentors were more likely to report that they met less frequently with their mentors and that they had inadequate resources to do their work, although this difference was not statistically significant ($P=.08$). Faculty in group 2 were more likely to report that yearly reviews did not include a discussion of their progress toward promotion

Baseline Characteristics of Physician Faculty in Group 1 and Group 2*

	Group 1 (n = 154)	Group 2 (n = 156)	P
Age, mean \pm SD, y	47 \pm 9	45 \pm 10	.02
Women	35 (23)	55 (36)	.04
Years on faculty, mean \pm SD	11 \pm 9	10 \pm 9	.02
Time in clinical care, %	31	72	<.001
Rank			
Instructor	1 (1)	5 (3)	<.001†
Assistant professor	46 (30)	79 (51)	
Associate professor	44 (29)	46 (29)	
Full professor	61 (40)	25 (16)	
Academic track			
Tenured	78 (52)	39 (26)	.006†
Tenure eligible	11 (7)	15 (10)	
Collateral	62 (41)	94 (62)	
Plan to change to tenure track	17 (27)	11 (12)	.02‡
Time for academic work, mean \pm SD, h/mo	45 \pm 52	15 \pm 17	<.001§
Slower career progress	27 (20)	41 (31)	.05
Adequate resources	87 (57)	71 (47)	.08
Have a mentor	107 (69)	85 (56)	.02
Meet weekly with mentor	49 (46)	25 (30)	.03
Advised about promotion and tenure criteria	72 (59)	45 (39)	.003
Understand promotion and tenure criteria	90 (76)	68 (51)	<.001

*Data are given as number (percentage) except where indicated otherwise. Physician faculty in group 1 spend 50% or less of their time in clinical care, and those in group 2 spend more than 50% of their time in clinical care. Some respondents did not answer all questions (ie, varying number of respondents).

†Adjusted for sex and age.

‡Analysis limited to collateral faculty.

§Full-time employees adjusted for years on faculty.

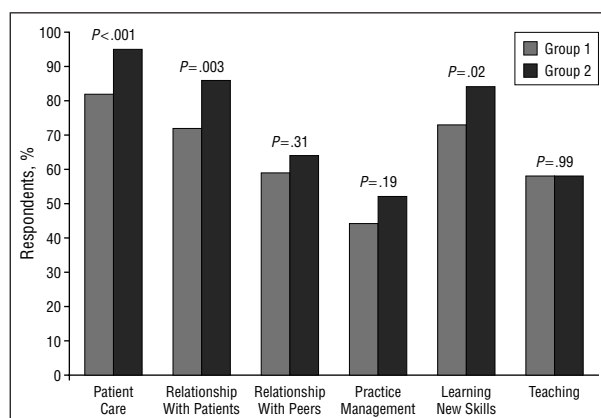


Figure 1. Percentage of respondents in group 1 ($\leq 50\%$ of time in clinical care) and group 2 ($> 50\%$ of time in clinical care) rating this aspect of their career as important.

and that they did not understand the promotion and tenure guidelines.

Faculty were asked to rate how they personally valued aspects of their career as a sign of their career success. Groups 1 and 2 highly valued teaching, but group 2 valued high-quality patient care and relationships with patients (**Figure 1**) more than research, publication, and aspects of an academic career that lead to national visibility (**Figure 2**). When asked from which groups the

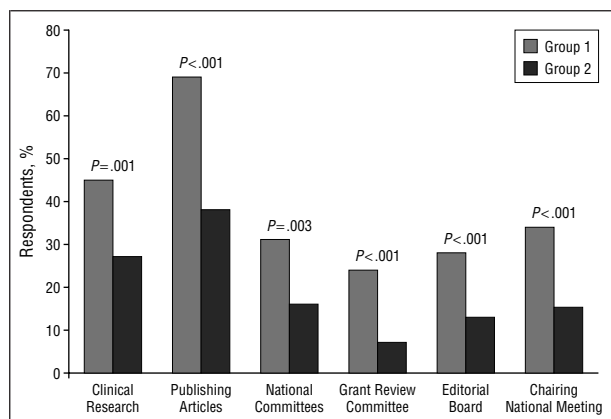


Figure 2. Percentage of respondents in group 1 ($\leq 50\%$ of time in clinical care) and group 2 ($> 50\%$ of time in clinical care) rating this aspect of their career as important.

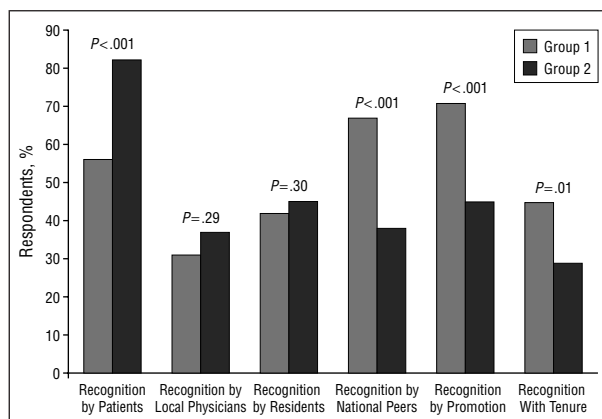


Figure 3. Percentage of respondents in group 1 ($\leq 50\%$ of time in clinical care) and group 2 ($> 50\%$ of time in clinical care) rating recognition by various groups as important.

faculty most valued recognition of their work, faculty in group 2 responded that recognition by patients and residents was more important than national recognition (**Figure 3**). Faculty in group 2 were less likely to value promotion and tenure as indicators of their career success.

Only 32% of faculty in group 2 reported that they were extremely committed to a career in academic medicine compared with 70% of faculty in group 1. These results are unchanged when analyzed for surgical and nonsurgical departments. In a multiple logistic regression analysis, factors associated with higher commitment to academic medicine included rank of professor ($P = .04$), having tenure ($P = .006$), spending less than 50% of their time in clinical care ($P < .001$), and male sex ($P = .007$). Compared with group 1, faculty in group 2 were less likely to report that they will stay in academic medicine in the next 10 years (66% and 53%, respectively) and were more likely to report that they will leave because of dissatisfaction with academic medicine (17% and 27%, respectively), limited possibilities for career advancement (34% and 48%, respectively), and lack of job security (15% and 29%, respectively).

COMMENT

In the past 2 decades there has been a significant change in the finances of academic medical centers. The cost of biomedical research has increased, and there is greater competition for funding. Reimbursement for clinical services has declined, leading to a significant decrease in clinical income. Total government support for academic medical centers has decreased, forcing academic medical centers to use income from faculty practice plans, which has increased 3-fold in 2 decades (from 10% in 1970 to 32% in 1992).^{6,12} To accomplish this, large numbers of faculty were hired primarily to provide clinical care and to teach.

Almost 75% of medical schools now have separate tracks for faculty whose primary responsibility is teaching and patient care.^{4,13-18} Some schools have as many as 3 tracks for clinicians: clinician-researcher (clinician-

scholar), clinician-educator, and dedicated clinician (with few teaching responsibilities). Levinson et al² further divide clinician-educators into 2 groups: those who spend no more than 50% of their time providing patient care and have an active role in developing curricula and organizing conferences, and those who spend 75% of their time caring for patients and the remainder supervising trainees in the clinical setting. Most institutions allow clinician-researchers to be on the tenure track, but less than 20% of academic medical centers allow clinician-educators and dedicated clinicians to be on the tenure track.^{4,17}

At VCU, half of the responding physician faculty were spending an average of 72% of their time providing patient care. These faculty with significant clinical responsibilities (group 2) were more likely to be women, less likely to be professors, and less likely to be tenured or on the tenure track. Faculty in group 2 had an average of 4 hours per week for academic work—less than a third of that of physician faculty with fewer clinical responsibilities. Faculty in group 2 were more likely to report having inadequate resources to accomplish their work, less likely to report having a mentor, and more likely to report slower career progress. This slower career progress is supported by data about faculty rank. Group 2 faculty are less than half as likely to be at the rank of professor despite similar age and years on the faculty. Faculty with greater clinical responsibility highly value aspects of their career that have to do with the provision of excellent clinical care and teaching but are less likely to value scholarship and aspects of their career that lead to national visibility.

What is the reason for the difference in resources available for career development for clinician-educators? Academic medical centers have historically invested in the career development of physician scientists with protected time, mentoring, and research training. This is a necessary investment to ensure the career success that leads to the grant income that supports salaries and the medical school infrastructure. However, investment in the career development of clinical faculty members is not clearly linked to their clinical

or economic productivity. Many of the faculty entering clinical tracks have inadequate time to develop skills necessary for scholarly work because of competing clinical demands.⁷ In addition, most medical schools lack a career development structure for clinician-educators. Thus, clinical faculty spend increasing amounts of time providing patient care, and the time left for academic or scholarly activities is declining.^{5,18}

Although yearly performance plans and progress reports are mandated at VCU, faculty with greater clinical responsibilities were more likely to report that promotion and tenure criteria were not discussed and that they did not understand the criteria. Poorer understanding of the promotion and tenure criteria might be due to a number of factors. At VCU, the criteria are different for tenure and nontenure track faculty. Because department and division heads are more likely to have been promoted in the tenure track, they might not be familiar with the promotion and tenure criteria for clinician-educators. In addition, if clinical faculty think that the requirements for scholarship and national recognition make it less likely that they will be promoted, they might take less interest in promotion and tenure criteria. But, these data also raise the question of whether department and division chairs have a conflict of interest when counseling clinical faculty about their career progress. There is a financial incentive for them to encourage clinical productivity but little financial incentive to promote and invest in the career development of clinical faculty or their progress toward promotion.^{5,18}

The slow progress of clinical faculty toward promotion to professor is also due to an emphasis on scholarship and national recognition in most promotion and tenure criteria. At most institutions, these criteria were formulated at a time when clinical service was a minor component of the mission of the academic medical center.^{13,15} The results of our survey demonstrate that faculty with greater clinical responsibilities place higher value on aspects of their career that have to do with the local service and less value on scholarship and national visibility. Recently, questions have been raised about whether it is appropriate to use national recognition and scholarship as indicators of the success or importance of local accomplishments.¹⁰ However, 71% of academic medical centers require that clinician-educators do scholarly work for promotion.¹⁷ Although excellence in research and the advancement of knowledge is the cornerstone of the academic medical center, new models of career development and recognition must be developed to stimulate innovation and improvements in the local teaching and clinical programs.^{3,19-24}

The most striking finding of this survey was the great disparity in the commitment of faculty to a career in academic medicine. Only a quarter of the faculty with significant clinical responsibilities reported a strong commitment to academic medicine compared with almost three quarters of those with less clinical responsibility. Despite the argument that tenure no longer guarantees job stability in academic medicine

and is therefore “unimportant,”²⁵ the factors most strongly associated with higher commitment to a career in academic medicine include having tenure, the rank of full professor, greater time for scholarly work, and fewer clinical responsibilities. Faculty with greater clinical responsibilities are less likely to be in any of these categories. Lower commitment to academic medicine might have a number of hidden costs, including higher faculty turnover and less commitment to innovation and improvements in clinical care programs and teaching.

There are limitations inherent in the design of this survey. The response rate was 62% and the respondents were representative of the general faculty in sex, age, and percentage of time spent in clinical care. However, we surveyed only faculty who made the decision to stay within the academic medical center and not those who left. This survey relies on physician reports and may be biased. This is a survey of 2 associated academic medical centers and may not reflect the attitudes of physician faculty at other institutions with differing (1) resources for career development, (2) promotion and tenure criteria, and (3) proportions of time spent in clinical care.

Evans⁶ argued:

... [A]ny system that relies disproportionately on the research intensive model of faculty development—whether covertly or overtly—will become less and less able to accommodate the realities of professional development in which the current and future faculty must exist. ... Any academic faculty reward system based solely on the gold standard will become an impediment not a help.

The results of this survey suggest that academic medical centers are faced with 2 significant challenges: (1) how to invest in the career development of clinical faculty in a way that is fiscally responsible and will further its mission and (2) how to change institutional reward systems to better recognize and encourage the contributions of clinical faculty.

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REFERENCES

1. Jonas HS, Etzel SI, Barzansky B. Undergraduate medical education. *JAMA*. 1989; 262:1011-1019.
2. Levinson W, Branch WT, Kroenke K. Clinician-educators in academic medical centers: a two-part challenge. *Ann Intern Med*. 1998;129:59-64.
3. Arana GW, McCurdy L. Realigning the values of academic health centers: the role of innovative faculty management. *Acad Med*. 1995;70:1073-1078.
4. Kelley WN, Stross JK. Faculty tracks and academic success. *Ann Intern Med*. 1992;116:654-659.
5. Waugh D. Exploiting medical faculty [editorial]. *CMAJ*. 1991;144:1153.
6. Evans CH. Faculty development in a changing academic environment. *Acad Med*. 1995;70:14-20.
7. Bland CJ. Rethinking faculty development. *Acad Med*. 1995;70:945-946.
8. Applegate WB, Williams ME. Career development in academic medicine. *Am J Med*. 1990;88:263-267.

9. Fried CP, Fran Comano CA, MacDonald SM, et al. Career development for women in academic medicine: multiple interventions in a department of medicine. *JAMA*. 1996;276:898-905.
10. Levinson W, Rubenstein A. Mission critical: integrating clinical-educators into academic medical centers. *N Engl J Med*. 1999;341:840-843.
11. Buckley LM, Sanders K, Shih M, Kallar S, Hampton C. Obstacles to promotion? values of women faculty about career success and recognition. *Acad Med*. 2000;75:283-288.
12. Korn D. Reengineering academic medical centers: reengineering academic values? *Acad Med*. 1996;71:1033-1043.
13. Evans CH. Institutional challenges posed by faculty development. *Acad Med*. 1997;72:477-480.
14. Bickel J. The changing faces of promotion and tenure at U.S. medical schools. *Acad Med*. 1991;66:249-256.
15. Lovejoy FH, Clark MB. A promotion ladder for teachers at Harvard Medical School: experience and challenges. *Acad Med*. 1995;70:1079-1086.
16. Parris M, Stemmler EJ. Development of clinician-educator faculty track at the University of Pennsylvania. *J Med Educ*. 1984;59:465-470.
17. Jones RF, Gold JS. Faculty appointment and tenure policies in medical schools: a 1997 status report. *Acad Med*. 1998;73:212-219.
18. Swick HM. Academic medicine must deal with the clash of business and professional values. *Acad Med*. 1998;73:751-755.
19. Wilson DR. Salary structure, promotion, and tenure policies in nurturing the young academicians. *Clin Invest Med*. 1992;15:257-260.
20. Humphrey HJ, Sorensen LB, Buehler BA. Institutional change: experiences in two departments. *J Gen Intern Med*. 1997;12(suppl 2):S79-S82.
21. Lubitz RM. Guidelines for promotion of clinician-educators. *J Gen Intern Med*. 1997;12(suppl 2):S71-S78.
22. Jacobs M. Faculty status for clinician-educators: guidelines for evaluation and promotion. *Acad Med*. 1993;68:126-128.
23. Beasley BW, Wright SM, Cofrancesco J, et al. Promotion criteria for clinician-educators in the United States and Canada: a survey of promotion committee chairpersons. *JAMA*. 1997;278:723-728.
24. Osborn LM, Sostok M, Castellano PZ, et al. Recruiting and retaining clinician-educators: lessons learned from three programs. *J Gen Intern Med*. 1997;12(suppl 2):S83-S89.
25. Petersdorf RG. The case against tenure in medical schools. *JAMA*. 1984;251:920-924.